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10/572,630

12/15/2006

Markus Kloss

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EXAMINER

SPISICH, GEORGE D

ART UNIT

PAPER NUMBER

3616

MAIL DATE

DELIVERY MODE

01/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/572,630

Applicant(s)

KLOSS ET AL.

Examiner

GEORGE D. SPISICH

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date 3/17/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the gas generator having an external diameter substantially equal to the internal diameter of the terminal portions of the deflector (claim 8, lines 5-7) must be shown or the feature(s) canceled from the claim(s). Presently, and as should be best shown in Figure 3, there is a gap throughout and on the terminal ends of the deflector between the deflector and the gas generator. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 9 and 10 are objected to because of the following informalities:

In claim 9, line 2-3, and claim 10, line 3, the phrase "of a type" or "of the type" is unnecessary.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-7,9 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, line 3, the term "bridge-like" is inherently unclear due to the term "like". Examiner is considering this limitation to merely mean a radially outwardly extending formation.

In claim 6, line 2, the term section is unclear. Examiner believes and is considering this term should be "second" to remain consistent with the remainder of the claim.

In claim 7, lines 3 and 5, are unclear. It appears these lines are relating back to the details of claim 4, yet it is unclear to use different terms (such as "greater" in claim 4 and "relatively large" and "relatively small" in claim 7). Examiner is considering these limitations to relate to the differing cross sections that define differing aperture sizes.

In claim 9, line 4, the term "the cut-away region" lacks antecedent basis as this feature was not previously claimed in claims 8 or 1 (from which claim 9 depends). It appears that the cut-away portion was claimed in claim 3.

In claim 11, lines 2-3 are unclear since the airbag is not clamped to the gas generator but to the deflector. Examiner is considering this limitation to be the clamping of the airbag between the deflector and the housing as shown in the Figures.

In claim 11, line 3 is unclear. It is clearly shown that the chambers communicate with each other to a degree and impossible to consider the clamp to "substantially seal the chambers from each other". Examiner is merely considering this limitation to seal the back of the airbag as a clamping connection would inherently do.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 03/059690 (cited by Applicant).

WO '690 discloses (as shown in at least Figure 3) a gas deflector (1) for use in connection with an airbag and a cylindrical gas generator. The deflector comprises a generally tubular housing to accommodate the gas generator. The housing comprising two terminal portions (11, 12) and having an intermediate region (including 14 and the remaining raised formation) provided with a radially outwardly extending formation that defines first and second apertures (14a and 14b) through which gas from the gas generator "may flow substantially parallel" to the longitudinal axis of the housing.

The formation extends radially outwardly in a "bridge-like" manner.

Claims 1,3,5,8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Fontecchio et al. (USPN 5,340,147).

Fontecchio et al. discloses a gas generator (20) having gas outlet apertures (42a,42b) in the side wall of the generator and "alignment" with a radially outwardly extending formation (122a,122b) that includes first and second apertures (110a, 110c) that allows for gas from the generator to flow in a direction substantially parallel to the longitudinal axis of the housing.

The generator includes a mounting stud (158a) that is received in a "cutaway region" (the hole) of the deflector.

The formation extends in a radially outwardly "bridge-like" manner.

The interior end of the deflector and the exterior end of the generator have substantially the same diameter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO '690 in view of Wallner (USPN 5,918,898).

WO '690 has been previously discussed, and although the deflector of WO '690 could be considered to include mounting studs as the holes (23) receive a mounting stud, Examiner is not relying on this reference for the teaching of a mounting stud.

Wallner discloses a gas deflector (102) similar to Applicant's and further having a mounting stud (130) for securely mounting the gas generator/deflect.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the deflector of WO '690 to include mounting studs as taught by Wallner, so as to provide a secure mounting for the airbag arrangement.

Claims 4,6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO '690 in view of Tokunaga et al. (USPN 2004/0232664).

WO '690 has previously been discussed. WO '690 shows the raised formation having inclined outer walls. While Examiner believes that Figure 2 and possibly Figure 3 of WO '690 show what is considered different size cross-sectional area (14a and 14B

or 19a and 19b), Examiner is not relying on this detail alone to teach that provide a "formation" having differing cross section to provide a differing air flow characteristic.

Tokunaga et al. shows a deflector (21) having outlet apertures (21b and 21c) having differing cross sectional areas. This allows for differing amounts of air to be directed as desired into the airbag to allow for particular inflation of the airbag. The airbag of Tokunaga et al. includes different sized chambers and the apertures "direct" inflation gas into the chambers.

It would have been obvious to one of ordinary skill in the art to modify the deflector of WO '690 by providing apertures of differing cross section on the differing raised radial portion (14 or 13) as taught by Tokunaga et al. so as to direct different amounts of inflation gas into the airbag to control the inflation of the airbag to improve protection for the occupant.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fontecchio et al. (USPN 5,340,147) in view of Tokunaga et al. (USPUB 2004/0232664).

Fontecchio et al. has been previously discussed. Fontecchio et al. discloses an airbag (230) "clamped" to the exterior of the gas generator/deflector so that the airbag (chambers) are substantially sealed from each other as applicant's airbag. However, the airbag of Fontecchio et al. does not show a multi-chambered airbag.

It is common in the airbag art to include an airbag with multiple, or first and second chambers. This multi-chambered airbag concept is shown by Tokunaga et al.

Applicant's claim language in claim 10 only requires that the apertures "communicate" with the chambers. Any deflector having 2 outlets that directs air into an airbag having 2 chambers (such as the airbag of Tokunaga et al.), would be considered to have one aperture communicating with one chamber and the other aperture communicating with the other chamber even if both apertures communicate with both chambers.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the airbag of Fontecchio et al. to provide an airbag of first and second chambers as taught by Tokunaga et al. as multi-chambered airbags are common in the airbag art and provide even protection for the occupant. The apertures of Fontecchio et al. "communicate" with the chambers as Applicant has claimed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references show details relating to gas deflectors and mountings: Steimke et al. (USPN 7,063,350), Ogata et al. (USPN 6,860,506), Heigl et al. (USPN 6,802,532), Wallner et al. (USPN 5,704,634), Rion (USPN 5,308,108), Brown (USPN 5,913,536) Mabuchi et al. (USPN 7,364,194), Pripps et al. (USPN 5,752,715).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GEORGE D. SPISICH whose telephone number is (571)272-6676. The examiner can normally be reached on Monday-Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Q. Nguyen can be reached on (571) 272-6952. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Q. Nguyen/
Supervisory Patent Examiner, Art Unit 3616

/George D. Spisich/
Examiner, Art Unit 3616
January 13, 2009